



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,410	02/27/2004	Jong-jin Yi	Q78932	4531
23373	7590	09/14/2007	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			ABDULSELAM, ABBAS I	
		ART UNIT		PAPER NUMBER
		2629		
		MAIL DATE	DELIVERY MODE	
		09/14/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/787,410	YI, JONG-JIN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Abbas I. Abdulselam	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on 03 August 2007.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1-17 and 19-24 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 1-4,8-11,17,19-21,23 and 24 is/are allowed.  
 6) Claim(s) 5,12-15 and 22 is/are rejected.  
 7) Claim(s) 6-7 and 16 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 3, 2007 has been entered.

This office action is in response to a communication filed on 02/08/07. Claims 1-24 are pending.

### ***Allowable Subject Matter***

2. Claims 1-4, 8-11, 17, 19-21 and 23-24 are allowed.

### ***Response to Arguments***

3. Applicant's arguments filed on 08/03/07 have been fully considered but they are not persuasive.

Applicant argues that the cited references, Kavanagh (USPN 6809726) and (USPN 7106307) alone or in combination do not teach “deciding whether the first coordinate values exist in an active region of an active interface of the plurality of the interfaces; and interrupting a response to the touch input if the first coordinate values exist outside the active regions as a result of the decision”.

However as shown in the art rejection below, Kavanagh teaches a control logic processor (32) that determines whether the coordinates for each touch point (20) are within an acceptable

coordinate boundary (18), (col. 4, lines 61-64), and also discloses if the coordinates for an actual touch points (20) are not valid, the control logic processor (32) executes re-computation step (42), or rejects computed coordinates (42) as indicated Fig. 5 (42), (col. 5, lines 9-11). Therefore Kavanagh's teachings read over the argued claim limitations.

In arguing those claim limitations described above, applicant argues that applicant's invention is different such that the invention is "if the coordinates for the touch-point are within the currently active interface and status bar, they are valid and if the coordinates for the touch point are out of the currently active interface and the status bar, they are invalid". However this argued point is not in claim 5 as claim 5 talks nothing about a "status bar". Hence claim 5 remains rejected.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 12-15 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavanagh (USPN 6809726) in view of Cok (USPN 7106307).

Regarding claim 5, Kavanagh teaches a control method for a touch screen system having a display unit for displaying at least one of a plurality of interfaces and a touch panel for outputting a signal corresponding to a touch input on the display unit, (*touch screen display, Fig. 3 (10), coordinate boundary (18) such as circle and other shapes, col. 4, lines 12-14 and Fig. 3(18), display (10) with a calibration point (24)*) col. 4, lines 20-24 and Fig. 3 (10, 24), *displaying at least one calibration target and sensing a calibration touch for at least one calibration target, col. 2, lines 49-50 and col. 2, line 52*) comprising steps of: deciding whether the first coordinate values exist in an active region of an active interface of the plurality of the interfaces; (*a control logic processor (32) determines whether the coordinates for each touch point (20) are within an acceptable coordinate boundary (18), col. 4, lines 61-64*) and interrupting a response to the touch input if the first coordinate values exist outside the active regions as a result of the decision (*if the coordinates for an actual touch points (20) are not valid, control logic processor (32) executes recomputation step (42), or rejects computed coordinates (42) as indicated Fig. 5 (42), col. 5, lines 9-11*).

While kavanagh teaches a control logic processor (32) obtaining the coordinates of the actual touch point (20) for each calibration target displayed (*col. 4, lines 56-58, Fig. 3 (20) and Fig. 4 (32)*),

kavanagh does not specifically teach calculating first coordinate values of the touch input based on the signal outputted from the touch panel.

*Cok on the other hand teaches an external controller 18 coordinating the application of various signals to the touch screen 10, and performing calculations based on responses of the touch sensitive elements to touches, in order to extract the (X, Y) coordinates of the touch (col. 1, lines 39-44 and Fig. 1 (18)).*

*Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kavanagh's touch screen control system shown in Fig. 4 to adapt Cok's external controller 18 as configured in Fig. 1 because the use of an external controller (18) helps compute a location of the touch in a touch screen (10) as taught by Cok (col. 1, lines 35-37).*

Regarding claim 12, Kavanagh teaches the one interface of the plurality of interfaces is one of a box, a window, an icon, and a bar (coordinate boundary 18 shown as a circle in Fig. 3 may take shapes such as a square, rectangle ellipse etc., col. 4, lines 12-14).

Regarding claim 13, Kavanagh teaches the signal is a predetermined sensing signal (the calibration target corresponding to a previously determined calibration reference point; and sensing a calibration touch for at least one calibration target, col. 2, lines 50-52).

Regarding claim 14, Kavanagh teaches the first coordinate values indicate a position of the touch input (control logic processor 32 obtains the coordinates of the actual touch point 20 for each calibration target displayed, col. 4, lines 56-58).

Regarding claim 15, Kavanagh teaches interrupting the response comprises ignoring the touch input (Fig. 5 (42), rejecting compute coordinates, col. 5, lines 32-36).

Regarding claim 22, Kavanagh teaches the plurality of interfaces comprises plurality of windows (coordinate boundary 18 shown as a circle in Fig. 3 may take shapes such as a square, rectangle ellipse etc., col. 4, lines 12-14).

#### ***Allowable Subject Matter***

6. Claims 6-7 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following arts are cited for further reference.

U.S. Pat. No. 7,176,907 to Chao et al.

U.S. Pat. No. 6,727,895 to Botlari et al.

U.S. Pat. No. 5,682,181 to Nguyen et al.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abbas I. Abdulselam whose telephone number is 571-272-7685. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abbas abdulselam

Examiner

Art Unit 2629

September 12, 2007

